



**NUCLEAR CRITICALITY SAFETY PROGRAM (NCSP)
TECHNICAL PROGRAM REVIEW**

**MARCH 15-16, 2016
SANDIA NATIONAL LABORATORY**

FINAL AGENDA
Building 6585 (Rooms 110, 111 and 112)

8:30 AM - 5:30 PM

Tuesday, March 15, 2016

8:30 AM

Welcome from SNL

Gary Harms

Safety and Security Briefing

Gary Harms

Welcome and Introductions

Jerry McKamy

A Year of Highs and Lows for the CSSG

David Erickson

CSSG Review of the
Hands-on Training and Education Courses

Calvin Hopper

**NCSP
TECHNICAL PROGRAM ELEMENTS TO BE PRESENTED**

**ANALYTICAL METHODS
INFORMATION PRESERVATION AND DISSEMINATION
INTEGRAL EXPERIMENTS
NUCLEAR DATA
TRAINING AND EDUCATION
(UNIVERSITY TASKS)**

ANALYTICAL METHODS

ORNL

SCALE 6.2 and AMPX Development and Modernization for the NCSP

Brad Rearden

ORNL

Diagnosing Undersampling in Monte Carlo Eigenvalue and Flux Tally Estimates

Chris Perfetti

IRSN

Update of the Nuclear Criticality Slide Rule for Emergency Response to a Nuclear Criticality Accident

Matthieu Duluc

10:30 AM - 10:45 AM

BREAK

10:45 AM

**ANALYTICAL METHODS
(continued)**

ORNL

Recent Progress in Determination of Critical Experiment Correlations

B.J. Marshall

LANL

MCNP Progress for NCSP

Forrest Brown

LANL

Fission Multiplicity Model Usage in Criticality Calculations

Michael Rising

LANL

The Dawn of NJOY21 in 2015

Jeremy Conlin

OPEN DISCUSSION

ALL

INFORMATION PRESERVATION AND DISSEMINATION

LLNL

ICSBEP Accomplishments

Dave Heinrichs

12:30 PM - 1:30 PM

LUNCH



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1:30 PM

INFORMATION PRESERVATION AND DISSEMINATION
(continued)

LLNL	Website Statistics	Chuck Lee
NNSA/ORNL	Website Enhancements	Lori Scott
OPEN DISCUSSION		ALL
	INTEGRAL EXPERIMENTS	
LANL	Operational Considerations for Experimental Work at NCERC	Tim Beller
LANL	NCERC Control Room Upgrades	Ryan LeConte
LANL	NCERC Safety Basis Update	James Strelow
NNSS	KRUSTY Safety Basis Update	Jeff Lewis

3:30 PM - 3:45 PM

BREAK

3:45 PM

INTEGRAL EXPERIMENTS
(continued)

LANL	Subcritical Benchmark of the BeRP Ball Reflected by Tungsten	Jesson Hutchinson
LANL	Uncertainty as a Function of Time for Subcritical Experiment Parameters	Jesson Hutchinson
LANL	Material Considerations for Burst Reactor Designs	Bob Margevicius
LANL	Final Critical Experiment Design to Measure the Fission Neutron Spectrum Shape Using Threshold Activation Detectors	Theresa Cutler
LANL	Dynamics and Stability Analysis for the Kilowatt Reactor Using Stirling Technology (KRUSTY) Experiment	Steve Klein
LANL	Utilization of NCERC in Support of Nuclear Forensics Measurements	Todd Bredeweg John Bounds

5:30 PM

ADJOURN



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8:30 AM - 12:30 PM		Wednesday, March 16, 2016	
8:30 AM		INTEGRAL EXPERIMENTS (continued)	
	ORNL	The Collaborative International Benchmark Evaluation for the SILENE Solution Critical Experiment	Thomas Miller
	LANL	Evaluation of Engineering Controls Implemented to Mitigate Godiva Contamination	Joetta Goda
	LANL	Use of Comet to Support Development of the Design Basis for JAEA's Transmutation Physics Experimental Facility (TEF-P)	Joetta Goda
	LANL	Preliminary Flattop-25 Reevaluation Results	Jeff Favorite
	LLNL	TEX Subcritical Thermal and Dose Measurements	Catherine Percher
	LLNL	TEX-Hf Preliminary Design	Catherine Percher
10:30 AM - 10:45 AM		BREAK	
10:45 AM		INTEGRAL EXPERIMENTS (continued)	
	SNL	NCSP IE and T&EP Activities at Sandia	Gary Harms
	OPEN DISCUSSION		ALL
		NUCLEAR DATA	
	ORNL	Improvements for the ⁶³ Cu and ⁶⁵ Cu Resonance Evaluations for Criticality Safety Applications	Vladimir Sobes
	ORNL	Cross Section Evaluation of ⁴⁰ Ca for Neutron Energies up to 1.5 MeV and Validation of Tungsten Cross Sections up to 100 keV	Marco Pigni
	ORNL	Resonance Region Cross-Section Measurements for Calcium and Cerium	Klaus Guber
	IRSN	IRSN-ORNL Data Evaluation in Support of Criticality Safety: ²³⁵ U, ²³⁹ Pu, ⁵⁶ Fe, ¹⁶ O, ⁵⁴ Fe and ¹⁰³ Rh	Luis Leal
	LANL	NDAG and Nuclear Data Working Group Update	Skip Kahler
	LANL	Data Testing CIELO Evaluations with ICSBEP Benchmarks	Skip Kahler
	LANL	Evaluation of Prompt Fission Gamma Rays for n+U235, n+Pu239, and Cf252(sf)	Patrick Talou
12:30 PM - 1:30 PM		LUNCH	



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1:30 PM

**NUCLEAR DATA
(continued)**

RPI	Overview of Recent Nuclear Data Measurements at RPI	Yaron Danon/
KAPL	Status of the LINAC Refurbishment	Brian Epping

BNL	ADVANCE Status, ENDF/B-VIII Status and Resonance Fun	David Brown
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OPEN DISCUSSION		ALL
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TRAINING AND EDUCATION

ORNL	Status of the NCSP Training and Education Courses for FY2015	Doug Bowen
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LANL	Summary of CNEC and CVT Year One Measurement Campaigns	Jesson Hutchinson
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NCSP UNIVERSITY TASKS

Georgia Tech ORNL	Development of a New Unresolved Resonance Region Analysis Methodology	Andrew Holcomb
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GENERAL DISCUSSION/CONCLUSION	ALL
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3:30 PM - 3:45 PM **BREAK**

3:45 PM

optional

North Carolina State University	<u>Movie:</u> Thermal Scattering Data Generation and Advance Methods Development	By: Ayman Hawari
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4:00 PM

ADJOURN

4:15 PM

NDAG MEETING

for invitees only